

Title (en)

Pressure reducer for stabilizing fluid flows after an expansion accompanied by a degradation of the kinetic energy.

Title (de)

Druckentspanner zum Stabilisieren von Fluidströmen bei Entspannung, begleitet von einer Verminderung der kinetischen Energie.

Title (fr)

Détendeur pour stabiliser l'écoulement de fluides lors de détente accompagnée de dégradation d'énergie cinétique.

Publication

**EP 0266566 A2 19880511 (FR)**

Application

**EP 87114478 A 19850218**

Priority

FR 8403206 A 19840301

Abstract (en)

[origin: US4688755A] At the time of expansion and accompanying kinetic degradation of a flowing stream of fluid, the flow is stabilized by forming at least two contiguous flow streams which consist of the same fluid but have a different velocity distribution and the two streams are then mixed. When applying the method to a valve provided with a so-called "hemispherical" closure member for compressible fluids, subsonic discharge nozzles are formed by cutting recesses in the valve seat downstream of the zone in which the valve closure member bears on the valve seat in the closed position. The subsonic discharge nozzles are disposed in alternate sequence with supersonic discharge nozzles formed by the opposite surfaces of the valve closure member and of the valve seat outside the recesses. When the method is applied to a multi-bore pressure reducer for compressible gases, a pressure-reducing plate is provided with low-discharge ducts in adjacent relation to high-discharge ducts.

Abstract (fr)

Détendeur à trous pour gaz compressibles, comprenant une plaque (101) transpercée de canaux à faible débit (105) voisinant avec des canaux à fort débit (104), dans lesquels l'écoulement de fluide lors de détente accompagnée de dégradation cinétique crée au moins deux écoulements contigus du même fluide, mais de répartition des vitesses différentes qui se mélangent à la sortie du détendeur.

IPC 1-7

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CPC (source: EP US)

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